

MACHINE LEVEL CONTROL RECORD

MACHINE TYPE 13SD SERIAL No. 13762 SUFFIX LEVEL E/C 421057

[illegible]

ANY SIGNIFICANT REPLACEMENT OR REMOVAL SHOULD BE NOTED AND DATED.



MACHINE LEVEL CONTROL RECORD

MACHINE TYPE 13SD SERIAL No. 13762 SUFFIX LEVEL E/C 421057

B/M No.	E/C No.	D/A No.	DESCRIPTION	INSTALLED	
				DATE	INITIAL
2166560	415352		SLT Panel Rework	11-1	PEH
2166561	415368		Functional Interlock Change	11-1	"
2166562	415372		SLT Panel Rework	12-2	"
2166565	415374		Power Sequence Improvements	12-3	"
2167003	415388		Gate Assembly Revision	12-3	"
2166567	415408		Improved Read Amp. & Access Cards	12-29	"
2166568	415419		Transducer Rewiring	12-29	"
2167006	415407A		Replace Head Load Springs	12-29	"
2157007	415335A		Replace Preload Bearing	12-29	"
2167009	415398		Remove Interlock Handle Spring	1-11	"
2166565	415374A		Correct Errors in E/C 415374	3-9	"
2166569	415416		Replace ALD's & Supply 48 V Terminal	3-9	"
2167011	415393		Filter Assembly	4-5	"
2167008	415423		Head Load Plug Retainer	4-5	"
2167005	415386		Transducer Locking Block	4-6	"
2166570	415433		Tachometer Capacitor	5-27	"
2166570	415433B		SLT Panel Rework	7-14	"
2166572	415444		Access Logic SLT Card	7-14	"
2167024	415477		Replace Door Opener	7-22	"
2167102	421001A		Replace Defective Spindle	7-22	"
2166573	415447		Interlock Compatibility	8-5	"
2167027	421102A		Replace Disk Guide	8-10	"
2167023	415379C		Replace Card Retainer	9-26	"
2167031	421011A		Improve Lower Head Clamp	1-25	"
2166574	421016		Install Head Hold Circuit	10-30	"
2166575	421019		New Transducer SLT Card	12-10	"
	421025		SLT Panel Rework	1-19	LWH
	421025A		Change Disposition Only	3-1	"
2166577	421029		Install New Transducer Card	1-19	"
	421103		Ins. New Head & Arm Assembly	2-10	"
2166578	421032		Ins. Res. to CE Lines & SLT Panel Rwk.	4-1	"
2166580	421036		Update IIDS	6-27	"
	421013		Improved interlock and AC Box	11-30	"
	421013A		Revise Interlock and AC Box	11-30	"
2166582	421043		Rework cartridge unlock Light	11-30	"
2166584	421047		CE Manual Head Load	4-1	"
2166585	421057		Install RC Network K3 Relay	4-27	"

ANY SIGNIFICANT REPLACEMENT OR REMOVAL SHOULD BE NOTED AND DATED.

P/N 2219161
SHEET 1 OF 5

IBM

FIELD ENGINEERING
INSTALLATION INSTRUCTIONS

MACHINE TYPE 13 SINGLE DISK FILE

ENGINEERING CHANGE HISTORY			
E / C NO.	DATE	SHEET	NO.
415416	12/30/65		
415438	23MAR66	1-4	
421028	17MAR67		
421046			
421023	5/28/70		

23 HOLE PUNCH FOR INSTALLATION BINDER

INSTALLATION INSTRUCTIONS

P/N 2219161
SHEET 2 OF 5
SHEET

UNIT INSTALLATION INSTRUCTIONS

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Cabling to FCU	2
Mechanical Checks	2
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Head - Disk Check (Power Off)	3
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Head Unloading Check	4
Power - On Motor Sequence Check	4
Head Alignment Check	4
General Checks	4

ENG. DATE	12/30/65	23MAR66	17MAR67	10NOV67		
CHANGE NO.	415416	415438	421028	421046		

INSTALLATION INSTRUCTIONS

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SHEET 3 of 5

NOTE: Do the following steps in the sequence given unless otherwise noted. For adjustment procedures consult the 13 single disk F.E. Maintenance Manual.

A. Unpacking

1. Remove packing. Check machines for possible shipping damage.
2. Inventory the parts in the CPU shipping group.
3. Remove shipping braces, head covers, etc.
4. Install the 13SD file in mounting brackets of host system.

B. Baseplate Grounding Check

1. Measure resistance between the base of the 13SD file and the frame of the host system. The reading should be 5 megohms or higher.

(The baseplate is the large aluminum casting on which the access mechanism is mounted. It is normally grounded at the point only by means of a lead connected to the gate DC terminal.)
2. If no extra grounds exist, continue. Any shorts between 13SD baseplate and host system frames must be eliminated.
3. Repeat item B for all 13SD files being installed.
4. Install motor start/stop and indicator lamp cable from FCU. Plug into taper pin blocks TB3 and TB3A (XA101).
5. Install control cable between FCU and 13SD file. In the 13SD file, plug the control cable into SLT board position A1A2.

C. Cabling to CPU or FCU

1. Remove all AC power to CPU/FCU.
2. Install AC cable between CPU/FCU and 13SD file. Plugging one end into the FCU AC plug provided and connect the other end to AC terminal block TB-4.
3. Install DC cable between CPU/FCU. Connect to TB1. CAUTION: Incorrect wiring can destroy SLT board and cards.

D. Mechanical Checks

1. Check head load springs for proper seating against R/W heads. Check that arm clamps are snug.
2. Check the R/W head plugs for no loose connectors.
3. Check transducers for no loose connectors.
4. Check terminal voice coil and tachometer for no loose terminals or shorts.
5. Check motor drive belt for proper tension and tracking.

ENG. DATE	12/30/65	23MAR66	17MAR67	10NOV67		
CHANGE NO.	415416	415438	421028	421046		

INSTALLATION INSTRUCTIONS

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 SHEET 4 of 5

6. Check that SLT cards and paddle cards are securely plugged in the gate.
7. Repeat steps D1 - D6 for all 13SD files being installed.

E. Power Check 13SD File

1. Check line voltage and cycle rating on all 13SD files being installed to insure they match the CPU or FCU. Line voltage and cycle ratings are located on spindle drive motor and blower motor nameplates.
2. Apply power and check the following voltages with AC power on FCU or CPU. Adjust if necessary to nominal voltages.

TBI		
Voltage	Terminal No.	Source
+48	5	FCU/CPU
+ 6	3	" "
+ 3	1	" "
- 3	2	" "

3. Check the operation of the fan.
 4. Repeat steps 2 and 3 on all 13SD files being installed.
- ## F. Head-Disk Check (Power Off)
1. Inspect CE disk cartridge for shipping damage.
 2. Vacuum entire base plate and clean if necessary.
 3. When machine has been exposed to extreme shipping environments, check for rust and corrosion. Special attention should be given to detents, disk drive spindle, and disk cartridge door opener. Corrosion may be removed with 90% Isopropyl Alcohol.
 4. Check R/W heads for damage.
 5. Check the head unload mechanism.
 6. Mount CE disk cartridge.
 7. **WARNING:** Do not let heads load during this step. Carefully move carriage forward into disk cartridge.
 8. Check closely for interference between heads, head cables, and disk. Move the carriage all the way to positive stop.
 9. Restore the carriage to the fully retracted position.
 - 10/ Repeat steps F2-9 on all 13SD files being installed.

ENG. DATE	12-30-65	23MAR67	17MAR67	10NOV67		
CHANGE NO.	415416	415438	421028	421046		

INSTALLATION INSTRUCTIONS

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 SHEET 5 OF SEE 5
 SHEET

G. File motor and head loading check

1. Insert CE disk cartridge and turn on the motor file Start/Stop switch.
2. Check the following items:
 - a. Disk cartridge drive motor starts.
 - b. When heads are loaded use flashlight to check that head cables, etc., are clear of disks. Note: Head load delay circuit requires 90 to 125 seconds.
 - c. Carriage is detented at track 000.
 - d. Ready light is on. (in CPU)

H. Head Unloading Check

1. While watching the heads, turn the file off. The heads should unload immediately.
2. If the heads do not unload at once, before the disks slow down appreciably, determine and eliminate the cause of this failure before proceeding, Then power up and repeat step 1 above.
3. Repeat Sections G and H above on all 13SD files being installed.
4. With all file motors on, turn system power off. All motors should turn off, all heads should unload.

I. Head Alignment Check

Notice: All heads must be checked and aligned at installation to insure interchangeability of disk cartridges.
 (Note : Set scope and heads as if to align heads. Allow 15 minutes warm up time. The head amplitude must not vary more than 25% of the optimum level. See figure in 13SD F.E. Maintenance Manual, Section 4.6.3)

J. General Checks:

Run diagnostics to check the operation of files, FCU and meters.

ENG. DATE	12/30/65	23MAR66	17MAR67	10NOV67		
CHANGE NO.	415416	415438	421028	421046		

CONNECTOR	
E02	XA0101AA2
E03	XA021AA4
E04	XA061AB1
E05	XA011AT2
E07	XA031AL1
E08	XA011AF2
E09	XA021AL4
E10	XA061AE3
E12	XA051AG4
E13	XA061AE4
D02	XA021AS4
D04	XA031BM4
D05	XA011AS2
D06	XA051AH4
D07	XA061AE6
D09	XA061AE7
D10	XA061AE8
D11	XA061AE9
D12	XA0101AA6
D13	XA052BK4

CONNECTOR	
E02	XA062AY4
E04	XA061AE1
E05	XA061AD2
E07	XA062AL4
E08	XA011AF2
E09	XA061AD3
E10	XA061AE3
E12	XA051AG4
E13	XA061AE4
D02	XA0101AA6
D04	XA061AD6
D06	XA062AJ4
D07	XA061AE6
D09	XA061AE7
D10	XA061AE8
D11	XA061AE9
D12	XA062AK4
D13	XA052BK4

SINGLE CARD	
B2	5803758 3758
2310	
XA062 A1 A4 B1 B4 C1 C4	
D1 D2 E1 E2 E3 E4	
F1 F2 F3 F4 G1 G2	
G3 G4	
UNUSED PORTIONS	
H	

CONNECTOR	
A06	XA042AC4
B04	XA0101AA3
B06	XA041AK4
C04	XA011AV4
C06	XA041AE2
D04	XA041AE4
E04	XA041AK2
E06	XA052BT2

DOUBLE CARD	
C2	5807319 7319
C3	SDS
XA021 A1 A2 A3 A4 A5 A6	
A7 A8 A9 AA	
UNUSED PORTIONS	
B C D	

CONNECTOR	
A06	XA0101AA6
B04	XA052BX2
B06	XA052BE4
C04	XA042AA4
C06	XA042AC4
D04	XA0101AA5
F04	XA0101AA2
E06	XA011AV4

DOUBLE CARD	
D2	5806298 6298
D3	
XA011 A1	
XA021 A2 A3 A4 A5 A6 A7	

CONNECTOR	
A04	XA041AW2
A06	XA041AW5
E04	XA011AV4
E06	XA051AB1

DOUBLE CARD	
1E2	5804679 4679
E3	

XA012 A1 A2 A3 A4 A5 A6	
A8 A9 AA AB AC AD	
AE AF AG AH AL	
AM AN AP AQ AR AS AT	
XA013 AU	
XA013 AW	
XA021 AX	
XA013 AY	
XA012 AZ B1	

CONNECTOR	
A04	XA011AV4
A06	XA011AV4
D04	XA051AA3
D06	XA051AA7

DOUBLE CARD	
F2	5807198 7198
F3	
XA041 A1 A2 A3 A4 A5 A6	
A7 A8 A9 AA AB AC	
AD AE AF AG AH AJ	
AK	

CONNECTOR	
A04	XA011AV4

DOUBLE CARD	
G2	5807274 7234
G3	
XA031 A1 A2 A3 A5 A6 A7	
A9 AB AC AD AE AF	
AG AH AJ AK AN AP	
AQ AY	
UNUSED PORTIONS	
B	

CONNECTOR	
E04	XA012AB2
E06	XA011AU4

SINGLE CARD	
H2	5800764 0764

XA011 A1 A2 A7 A8 A9 AA	
AB AC	

SINGLE CARD	
H3	5803780 3780
SDS	

XA011 A1 A2 A3 A4	
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CONNECTOR	
A06	XA011AU4
B04	XA031AB2
B06	XA011AU4
C04	XA041AA2
C06	XA052BX2
D04	XA0101AA2
E04	XA0101AA3
E06	XA011AV4

DOUBLE CARD	
J2	5807235 7235
J3	

XA051 02 05 06 07 09 14	
15	
XA052 17 18	
XA051 20 21	
XA052 22 23 25 26 27 29	
30	
XA051 31	
XA052 32 33	
XA051 34	
XA052 AC	
XA051 B1 C1 D1 D2 D3 D4	

CONNECTOR	
A06	XA031AZ3
B04	XA031AY7
B06	XA042AA4
C04	XA031AX7
C06	XA061AB6
D04	XA012AB2
E04	XA041AA2
E06	XA031AE4

DOUBLE CARD	
K2	5807511 7511
K3	

XA051 A1 A2 A3 A4 A5 A6	
A7 A8	

UNUSED PORTIONS	
B C	

CONNECTOR	
A04	XA031AB2
A06	XA031AB1

SINGLE CARD	
L2	5815

XA011 A2	
XA052 B1	
XA011 B3	

DOUBLE CARD	
M2	5804613 4613
M3	

XA042 A1 A2 A3 A4	
XA052 B1	

DOUBLE CARD	
N2	5804673 4673
N3	

XA042 A1 A2 A3 A5 A6 A7	
A8 A9 AA AB	
XA031 AC	
XA042 AD AE AF AG	

PLUG LIST				
PART NO	ACC	TYPE	SOCKETS	TOTAL
5800764		0764 H2		01
5803758	2310	3758 B2		01
5803780	SDS	3780 H3		01
5804613		4613 M2		01
5804673		4673 N2		01
5804679		4679 E2		01
5806298		6298 D2		01
5807198		7198 F2		01
5807234		7234 G2		01
5807235		7235 J2		01
5807319	SDS	7319 C2		01
5807511		7511 K2		01
		5815 L2		01
		CONN	A2 A3 B4 C4	11
			D4 E4 F4 G4	
			H4 J4 K4	

SOCKET LISTING

DATE 11-26-68 MACH. 13SD

LOG 7322 BOARD 01X-A1

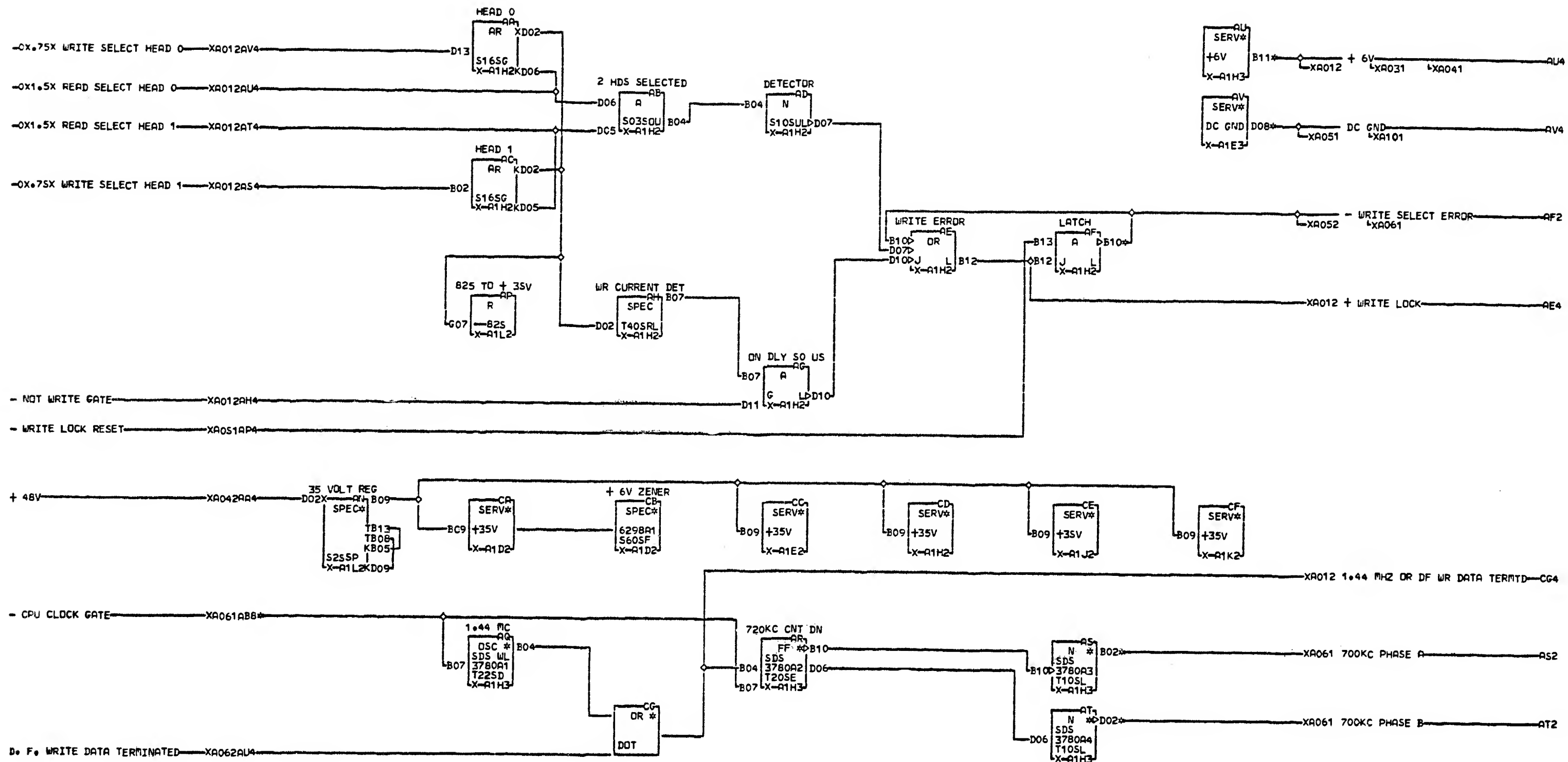
PREV. ENGR. 11-15-67 421047

PRES. ENGR. 11-26-68 421063

P.N. 2199527

IBM CORP. SDD BLK.

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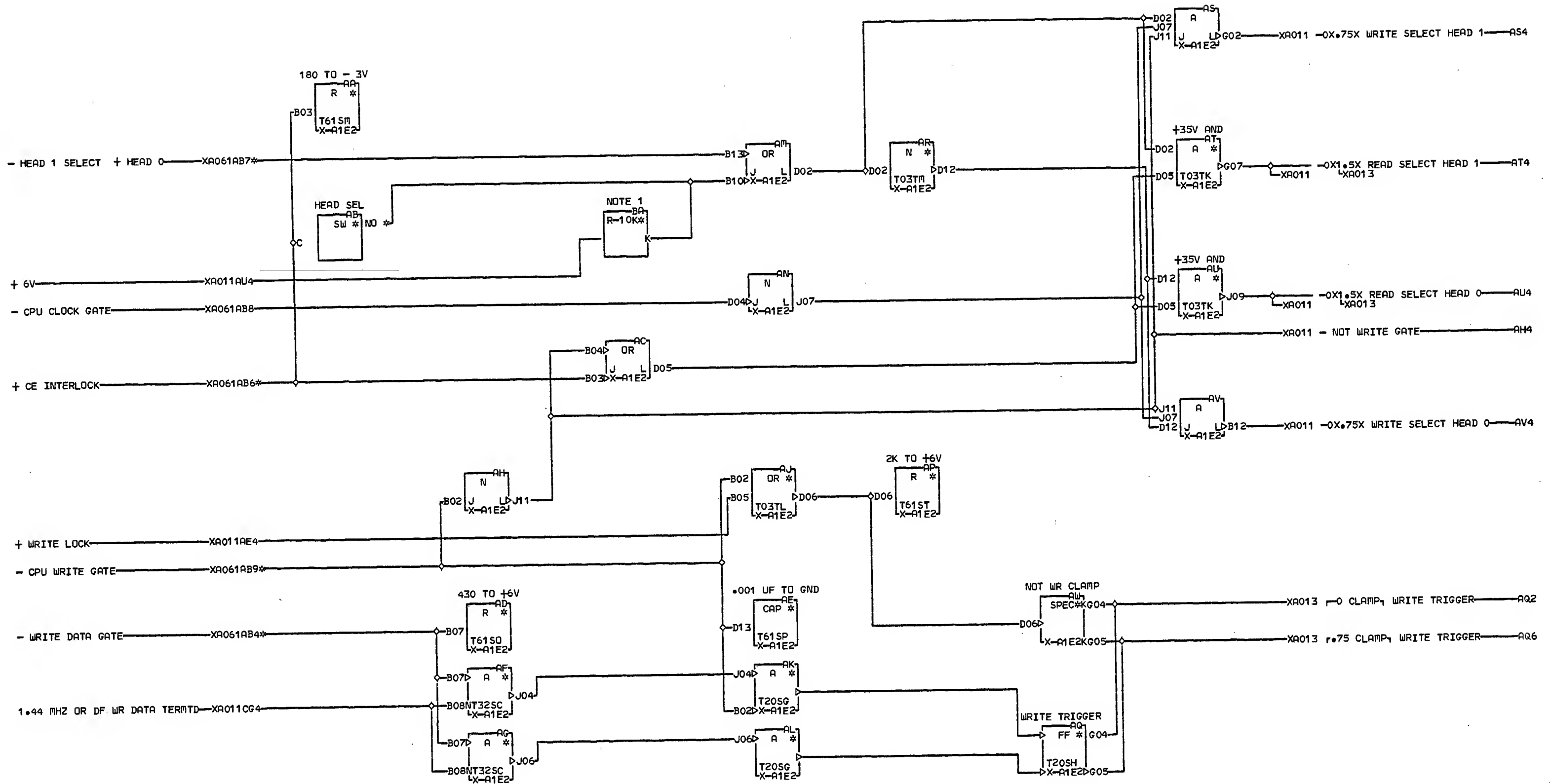
NOTE: MAY USE 5804612 OR
5801352 IN PLACE OF 5805815
X ACC SDS USED
A IN SELF CONTAINED
0 VERSION WITHOUT
1 LINE DRIVERS AND
1 TERMINATORS

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XA061AB8 01X-A1H4B06
01X-A1A2D10 AV4 X-A1E4A04
01X-A1A3D10 01X-A1D4E04
AF2 X-A1A2B08 01X-A1E4A06
01X-A1A3B08 01X-A1C4E06
AS2 X-A1A2D05 01X-A1H4E06
AT2 X-A1A2B05 01X-A1B4C04
AU4 X-A1G4E06 01X-A1F4A04
01X-A1H4A06

LOC. TYPE
X-A1D2 6298
X-A1H2 0764
X-A1H3 3780
X-A1L2 5815

1.44 MC OSC WRITE SELECT AND SAFETY			
E.C. HISTORY		MACH. 13SD	
415374	415444	FRAME	01
415374A	421025	IBM CORP. SDD	000
415433	421032		
415433B	421047		
DATE	LAST EC		
11-26-68	421063	P.No. 2199521	



NOTE 1. RESISTOR
LOCATED ON PADDLE
X CARD OF CABLE IN
A POS T7. SEE XA081.

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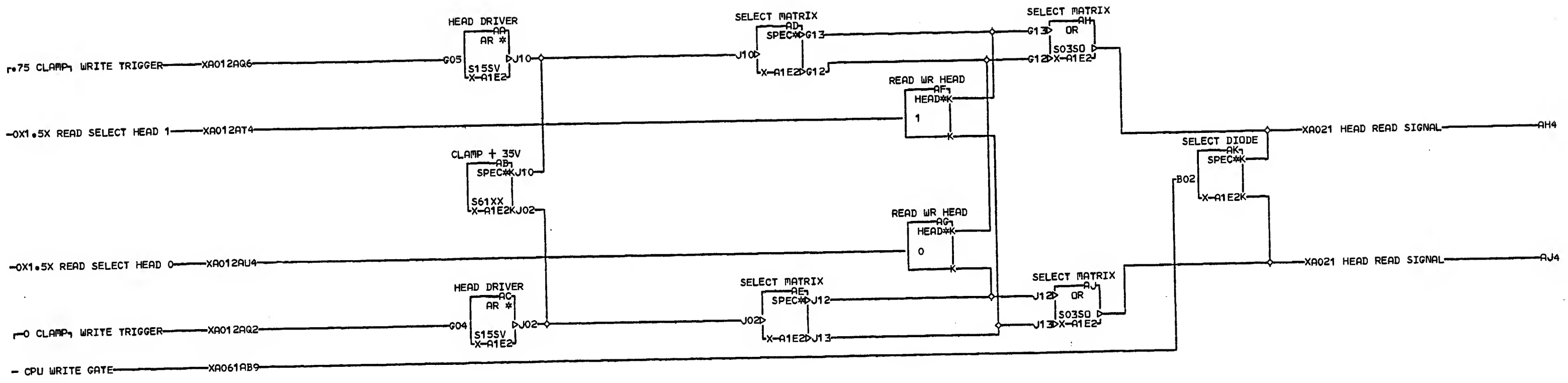
XA061AB4 01X-A1A3D09
01X-A1A2B13 XA061AB9
01X-A1A3B13 01X-A1A2D11
XA061AB6 01X-A1A3D11
01X-A1A2D07 AB2 X-A1J4D04
01X-A1A3D07 01X-A1G4E04
01X-A1J4C06
XA061AB7
01X-A1A2D09

LOC. TYPE
X-A1E2 4679

WRITE TRIGGER AND SELECT			
E.C. HISTORY		MACH.13SD	
415412D	415433	FRAME	01
415411V	415433B	IBM CORP. SDD	
415352	415444		
415374A	421032		
DATE	LAST EC		
12-12-67	421047	P.N.	2199564

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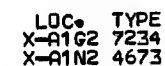
LOC. TYPE
X-A1E2 4679

WRITE DRIVER AND HEADS			
E.C. HISTORY		MACH. 13SD	
415412D	415433B	FRAME	01
415411V	415444	IBM CORP. SDD	
415374A			
415433	LAST EC	P.N. 2199563	
DATE	11-13-67	421047	

XA013
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XA013
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READ AMPLIFIER AND DATA SEPARATOR			
—E.C.—HISTORY		MACH.13SD	
415410U	415433		
415412D	415433B	FRAME	01
415411V	415444		
415408	415447	IBM CORP. SDD	
DATE	LAST EC		
12-12-67	421047	P.N. 2199522	



XA061AB1 AY7 X-A1J4B04
01X-A1A2B04 A23 X-A1J4A06
01X-A1A3B04 BN4 X-A1A2D04
AB1 X-A1K4A06
AB2 X-A1K4A04
01X-A1H4B04
AE4 X-A1J4E06
AW1 X-A1A2B07
AX7 X-A1J4C04

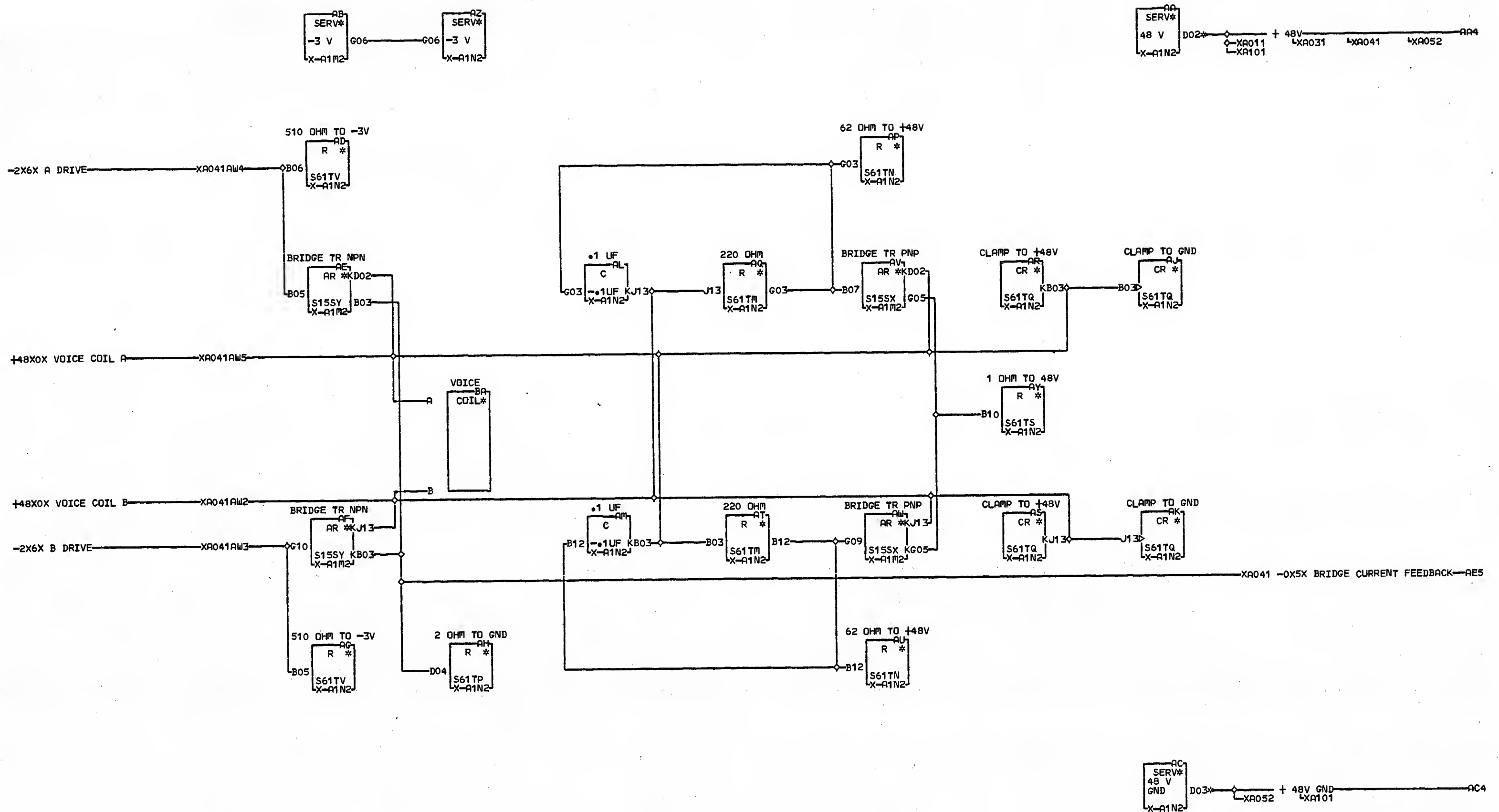
ACCESS LOGIC AND CONTROLS	
—E.C.—HISTORY—	
415352	415433B
415374	415444
415374A	415447
415433	421032
DATE	LAST EC
12-12-67	421047

MACH. 13SD
 FRAME 01
 IBM CORP. SDD
 P.N. 2199523



XA061AB3 AW2 X-A1D4A04
 01X-A1A2B10 AW5 X-A1D4A06
 01X-A1A3B10
 AA2 X-A1J4E04
 01X-A1H4C04
 AE2 X-A1B4C06
 AE4 X-A1B4D04
 AK2 X-A1B4E04
 AK4 X-A1B4B06

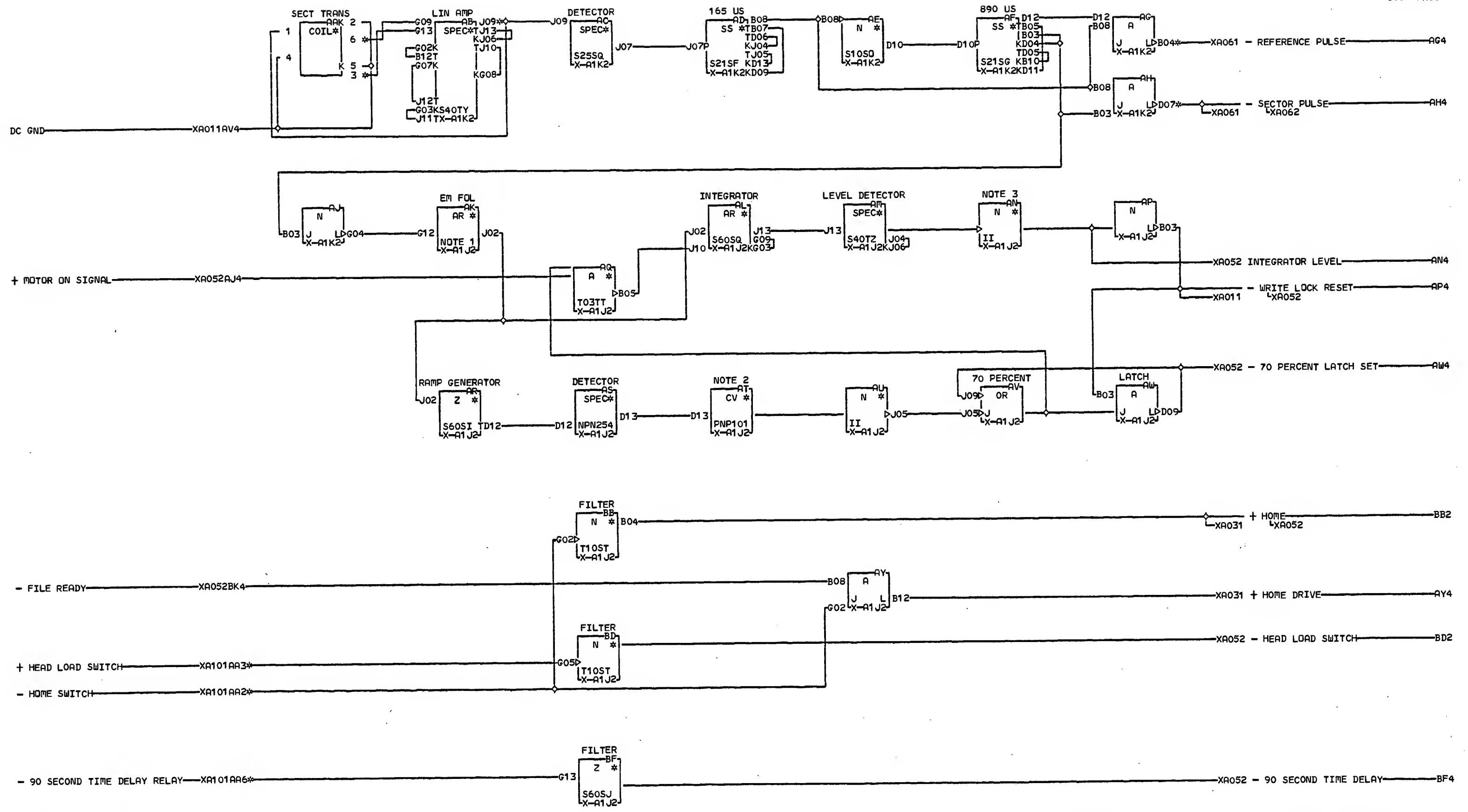
TACH AMP AND DETENT SELECT			
E.C. HISTORY		MACH. 13SD	
415352	415433B		
415374	415444	FRAME	01
415374A	421032		
415433	421047	IBM CORP. SDD	
DATE	LAST EC		
11-26-68	421063	P.N. 2199524	000



AA4 X-A1C4C04
 01X-A1J4B06
 AC4 X-A1C4C06
 01X-A1B4A06

LOC. TYPE
 X-A1M2 4613
 X-A1N2 4673

VOICE COIL BRIDGE				
E.C. HISTORY		MACH.13SD		
415412D	415374A	FRAME	01	
415411V	415433			
415352	415433B	IBM CORP. SDD	000	
415374	415444			
DATE	LAST EC	P.N. 2199565		
12-15-67	421047			



NOTE 1. PART OF S60SQ
NOTE 2. BLOCKS D1 TO D4
ARE CKT FLYER S60SI
NOTE 3. PART OF BLOCK AM
CKT FLYER S40TZ

XA101AA2 01X-A1A3D02
01X-A1C4E04 01X-A1A2D12
01X-A1A2B02 AA3 X-A1E4D04
01X-A1H4D04 AA7 X-A1E4D06
XA101AA3 AB1 X-A1D4E06
01X-A1H4E04 AG4 X-A1A2B12
01X-A1B4B04 01X-A1A3B12
XA101AA6 AH4 X-A1A2D06
01X-A1C4A06

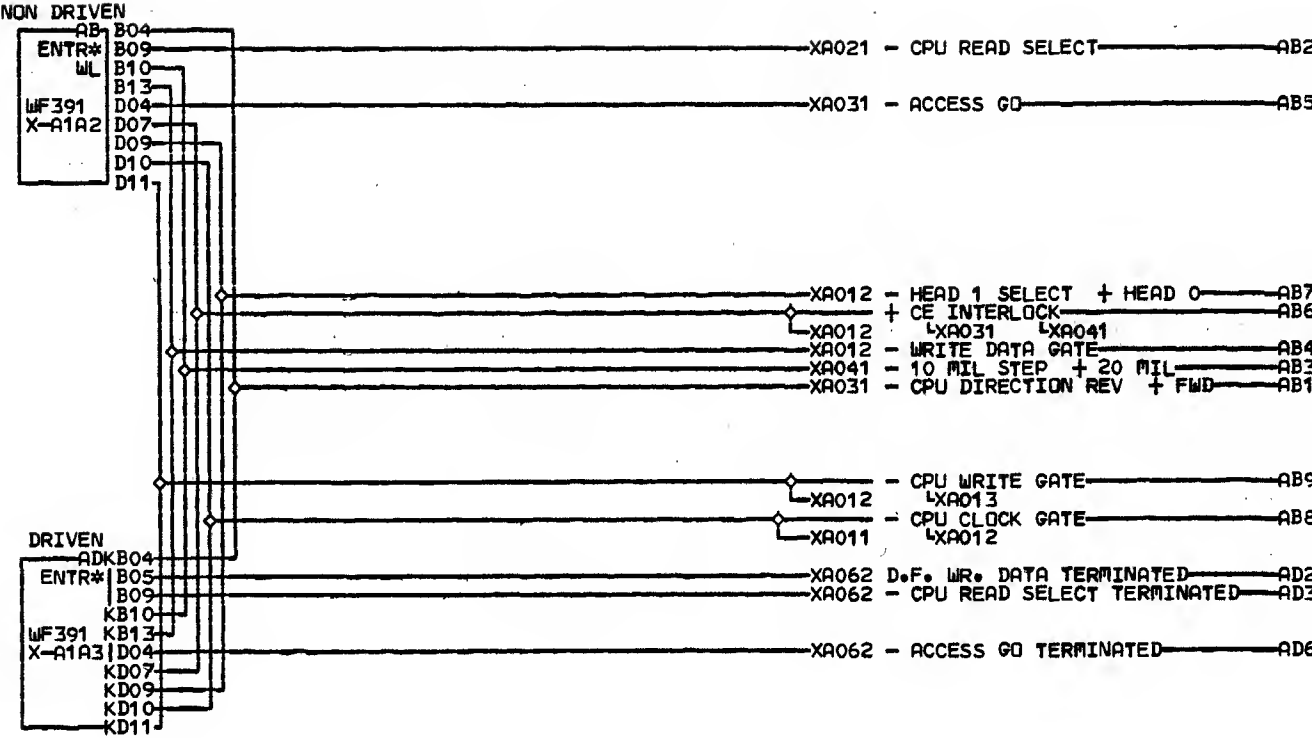
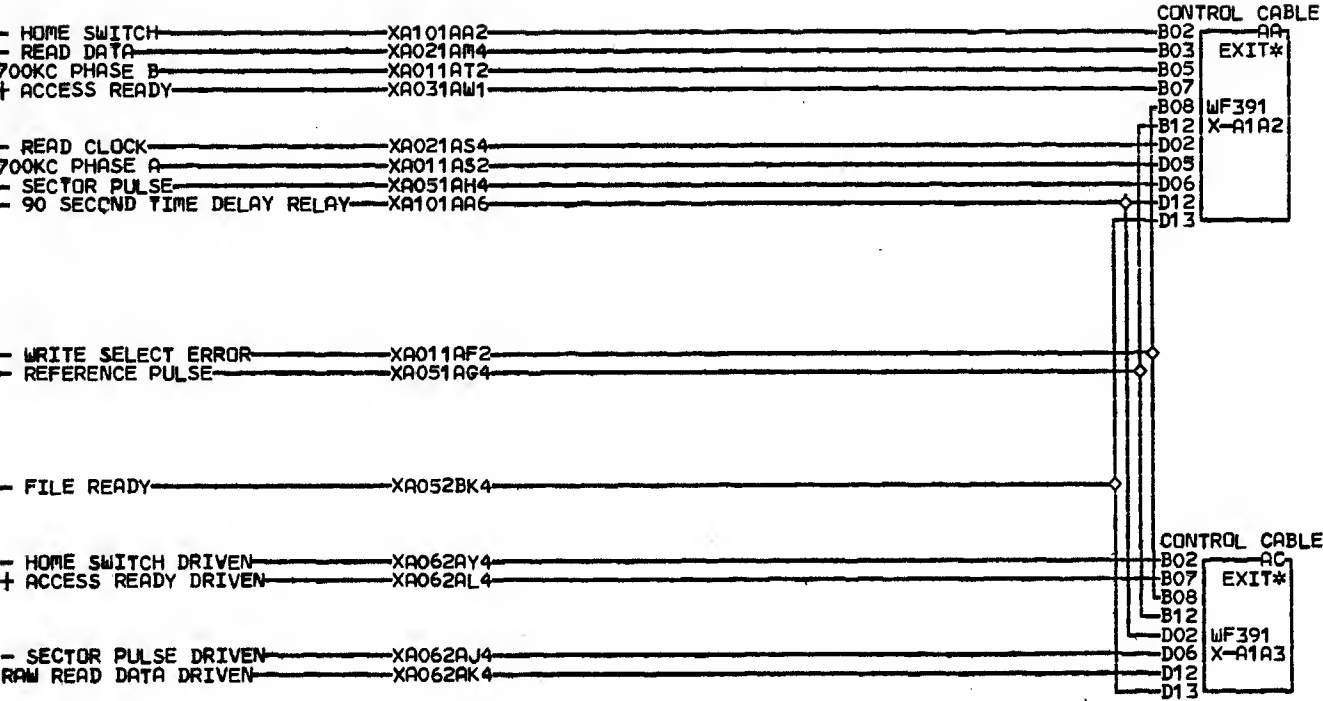
LOC. TYPE
X-A1J2 7235
X-A1K2 7511

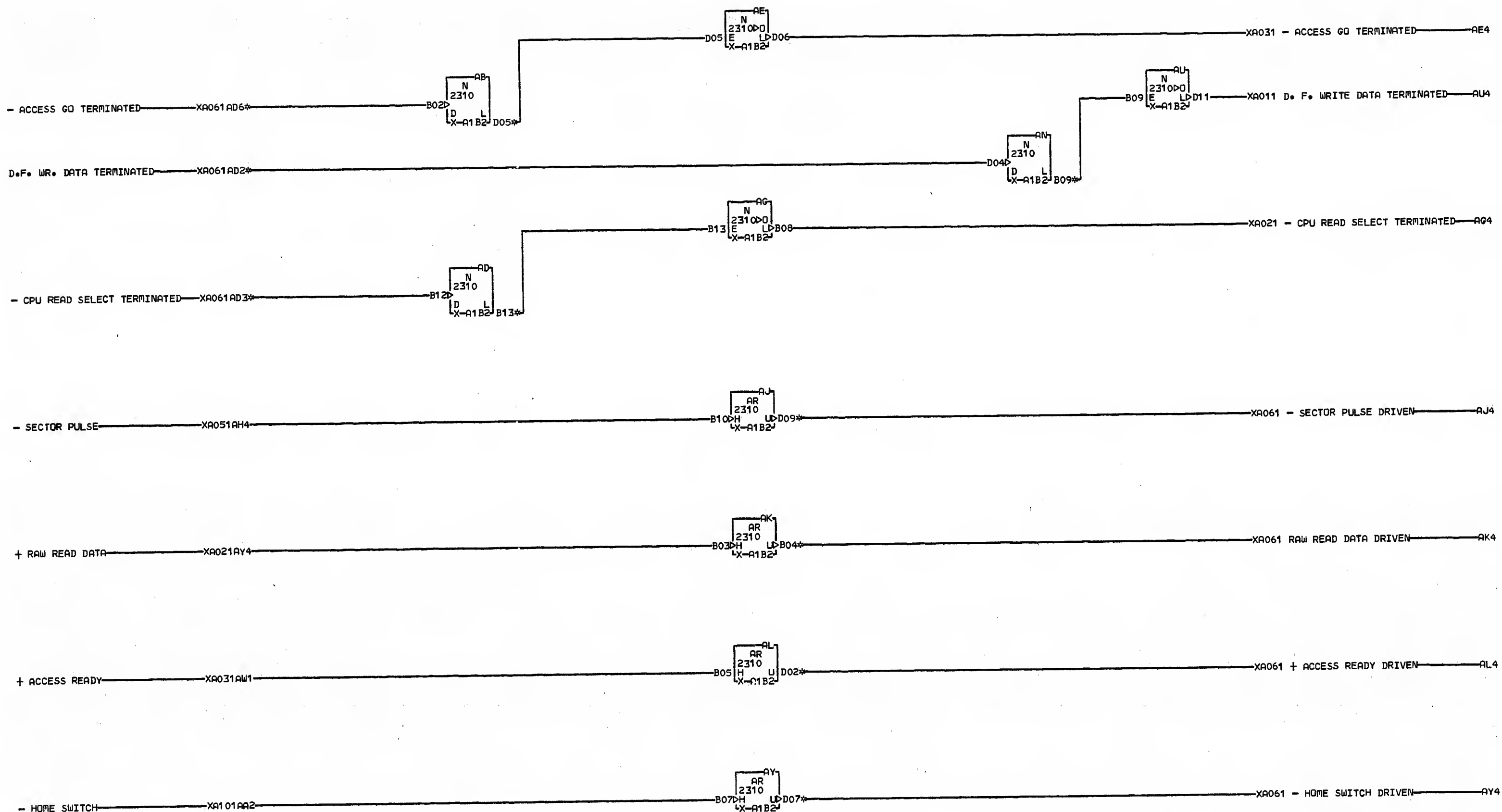
TRANSDUCER INTERLOCK			
E.C. HISTORY		MACH. 13SD	
415419	415447	FRAME	01
415433	421019		
415433B	421029		
415444	421032	IBM CORP. SDD	
DATE	LAST EC		
12-15-67	421047	P.N. 2199525	

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INTERLOCK HEAD LD.			
E.C. HISTORY		MAC#13SD	X P O S E N 000
415374A	415447		
415433	421016	FRAME 01	
415433B	421032	IBM CORP. SDD	
415444	421047		
DATE	LAST EC		
11-26-68	421063	P.N. 2199567	





NOTE. ACC 2310 USED
IN REMOTE VERSION
X WITHOUT WRITE OSC
A AND DATA SEPARATOR
O 2310-B7

XA061AD2	01X-A1A3D04	X-A1B2D09	AY4	X-A1A3B02
01X-A1A3B05	RESISTOR	AK4	X-A1A3D12	RESISTOR
RESISTOR	X-A1B2B02	RESISTOR		X-A1B2D07
X-A1B2D04	AB6	RESISTOR	X-A1B2B04	
XA061AD3	X-A1B2D05	AL4	X-A1A3B07	
01X-A1A3B09	AD6	RESISTOR	RESISTOR	
RESISTOR	X-A1B2B13	X-A1B2D02		
X-A1B2B12	AJ4	X-A1A3D06	AN6	RESISTOR
XA061AD6	RESISTOR	X-A1B2B09		

LOC.	TYPE
X-A1B2	3758

2310-B LINE DRIVERS AND TERMINATORS			
E.C. HISTORY		MACH. 13SD	
415411V	415433B		
415352	415444	FRAME	01
415374A	415447		
415433	421032	IBM CORP. SDD	
DATE	LAST EC		
11-22-67	421047	P.N. 2199566	

X
A
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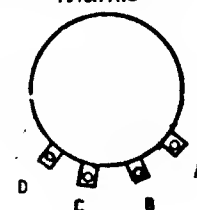
TERMINAL STRIPS, SWITCHES, RELAYS, COILS
SOLENOIDS, AND DIODES

POINTS	TERMINAL BARRIER TB					
	1	2	3	3A	4	5
1	XA101	OPEN	XA101	XA101	XA101	OPEN
2	XA101	XA101	XA101	XA101	OPEN	OPEN
3	XA101	XA101	XA101	XA101	XA101	OPEN
4	XA101	XA101	XA101	XA101	XA101	OPEN
5	XA101	XA101	XA101	XA101	XA101	XA101
6	XA101	OPEN	XA101	XA101	XA101	XA101
7	-	XA101	XA101	XA101	XA101	XA101
8	-	XA101	XA101	XA101	XA101	XA101
9	-	-	-	-	XA101	-
10	-	-	-	-	XA101	-

RELAY	NO.	COIL	CONTACTS		
			1	2	3
START	K1	XA101	XA101	OPEN	XA101
TIMER	K2	XA101	XA101	OPEN	-
DR MOTOR	K3	XA101	XA101	-	-
BLOWER MTR	K4	XA101	XA101	-	-

DIODES		LOCATION
DIODE	D1	XA101
DIODE	D2	XA101
DIODE	CR1	XA101

TACHOMETER CONNECTORS
VIEW FROM FRONT OF
MACHINE



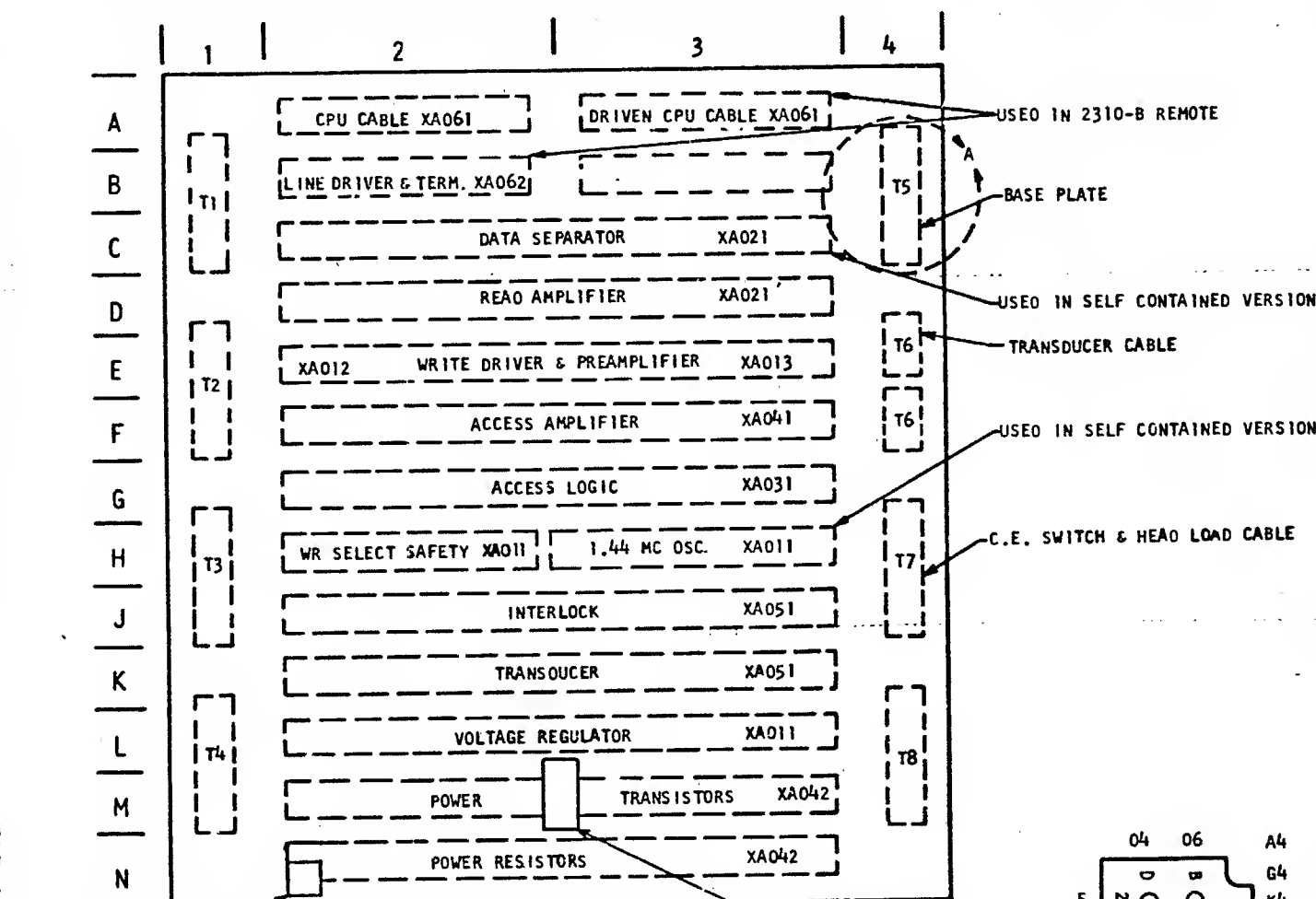
SWITCH	NO.	LOCATION
CART. IN PLACE	1	XA101
CART. UNLOCKED	2	XA101
HOME	3	XA101
HEAD LOAD	4	XA101
CE HEAD SEL	5	XA012
CE STEP MODE	6	XA041
CE DIRECTION	7	XA031
CE STEP CONTROL	8	XA031
MOTOR START	REF	XA101
MOTOR STOP	REF	XA101

COIL/SOL	LOCATION
R/W HEAD #0	XA013
R/W HEAD #1	XA013
TACHOMETER	XA041
TRANSDUCER	XA051
VOICE COIL	XA042
HEAD LOAD	XA101
OOD DETENT	XA101
EVEN DETENT	XA101
CART. UNLOCK	XA101

HEAD CABLE CONNECTIONS XA011

WIRE COLOR	OT	1B
GREY	E2 J12	E2 J13
RED	E2 J09	E2 G07
VIOLET	E2 G12	E2 G13
BLACK	O2 J08	E2 J08

LARGE CARD SOCKET ASSIGNMENTS & NOMENCLATURE. PIN SIDE SHOWN



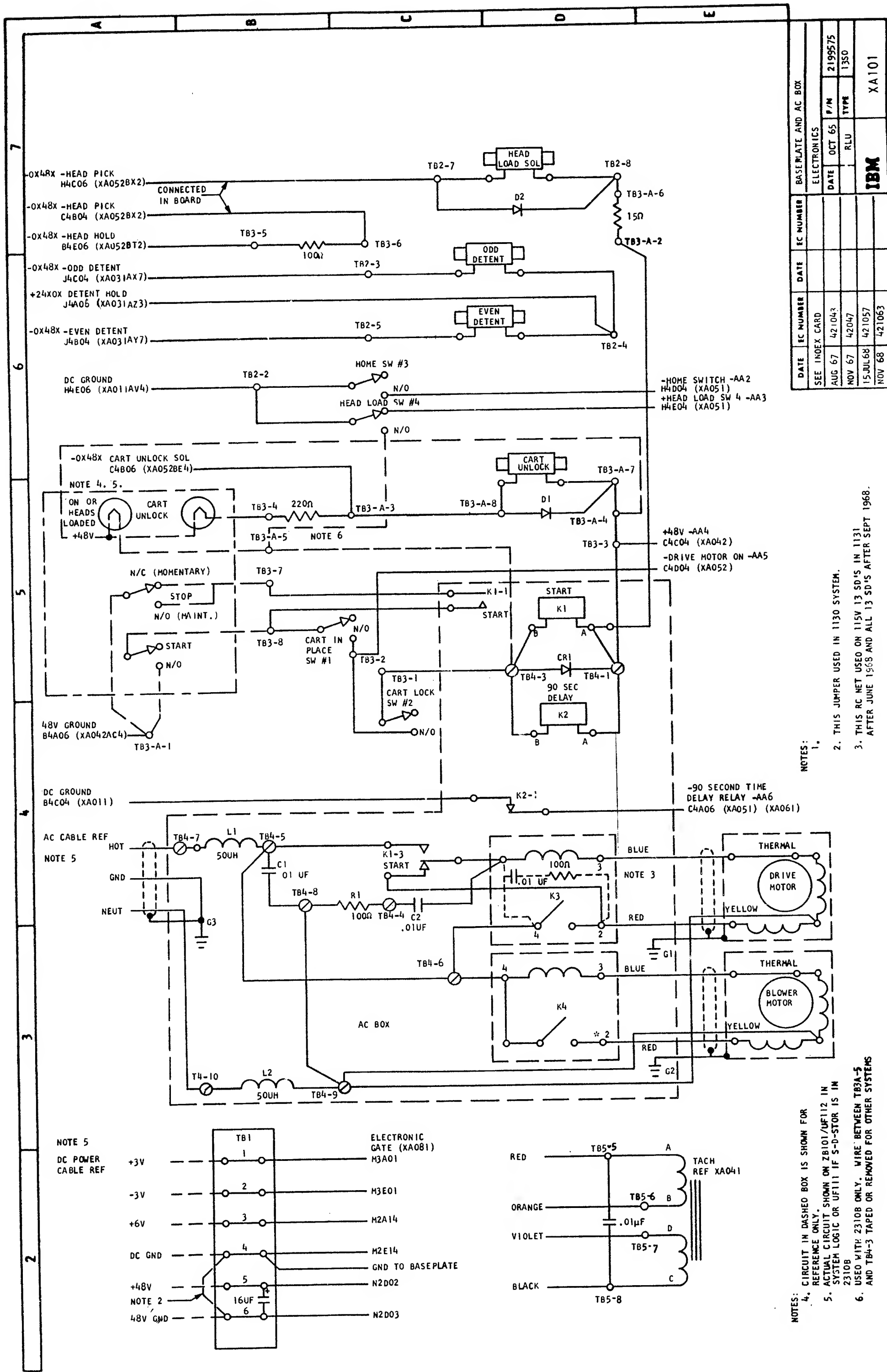
48V CONNECTOR

VOLTAGE	WHERE FOUND
TB1-5 +48V	N2D02, G2D02, F2002, L2B02, C4C04, J4B06
TB1-6 48V GND	N2003, M3B07, B4A06, C4C06
+35V REG	D2B09, E2B09, H2B09, J2B09, K2B09, L2B09
TB1-2 -3V	B06 SOCKETS B THRU M ROWS 2 AND 3, N3906
TB1-4 DC GND	O08 SOCKETS A THRU N ROWS 2 AND 3
TB1-1 +3V	D03 SOCKETS B THRU M ROWS 2 AND 3
TB1-3 +6V	B11 SOCKETS B THRU M ROWS 2 AND 3 G4E06, H4A06, H4B06

	04	06	A4
E	0	0	G4
A	2	0	K4
B	3	0	B4
C	4	0	H4
D	5	0	L4
E	6	0	
A	7	0	
B	8	0	C4
C	9	0	J4
D	10	0	H4
E	11	0	O4
A	12	0	K4
	13	0	N4

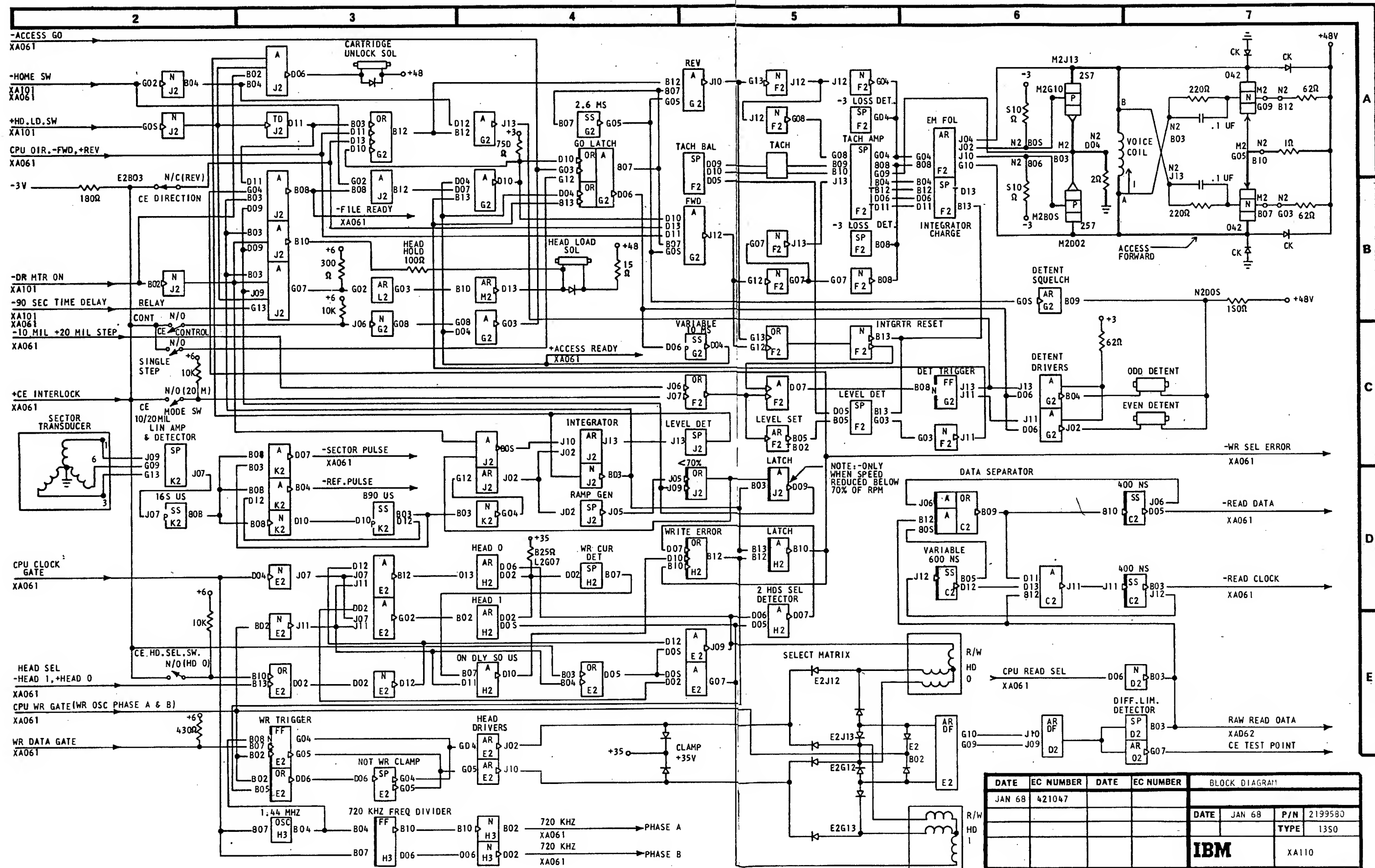
DETAIL A

DATE	EC NUMBER	DATE	EC NUMBER	SOCKET LOCATION AND CABLE			
SEPT65	415326	FEB 67	421032	GUIOE			
NOV 65	415374	AUG 67	421043	DATE	SEPT65	P/N	2199573
DEC 65	415374A	NOV 67	421047			TYPE	1350
MAR 66	415433			ICM		XA081	
MAY 66	415444						



BASEPLATE AND AC BOX		ELECTRONICS		DATE		P/N		TYPE		IBM	
DATE	EC NUMBER	DATE	EC NUMBER	DATE	EC NUMBER	DATE	EC NUMBER	DATE	EC NUMBER	DATE	EC NUMBER
AUG 67	421043	AUG 67	421043	AUG 67	421043	AUG 67	421043	AUG 67	421043	AUG 67	421043
NOV 67	42047	NOV 67	42047	NOV 67	42047	NOV 67	42047	NOV 67	42047	NOV 67	42047
15 JUL 68	421057	15 JUL 68	421057	15 JUL 68	421057	15 JUL 68	421057	15 JUL 68	421057	15 JUL 68	421057
NOV 68	421063	NOV 68	421063	NOV 68	421063	NOV 68	421063	NOV 68	421063	NOV 68	421063

- NOTES:
1. THIS JUMPER USED IN 1130 SYSTEM.
 2. THIS RC NET USED ON 115V 13 SD'S IN 1131 AFTER JUNE 1968 AND ALL 13 SD'S AFTER SEPT 1968.



FIELD ENGINEERING DIAGRAM MANUAL

FOR

SINGLE DISK STORAGE (INCREMENTAL ACCESS)

MACHINE TYPE NUMBER, MODEL NUMBER (IF APPLICABLE) AND MACHINE NAME

CONSISTS OF THE FOLLOWING:

FORM NUMBER (BASE FEDM)* Y26-4126-0

FORM NUMBER (FES)** Y26-0613

NOTES

- XI** THE FEDM AND ITS FES'S INCLUDE A SYSTEM DATA FLOW DIAGRAM, UNIT DATA AND CONTROL DIAGRAM, I/O OPERATION DIAGRAMS, AND CONDENSED LOGIC FLOW CHARTS AS APPLICABLE TO THE UNIT(S) BEING SHIPPED.
- XII** WHEN A FEDM IS ORDERED FROM MECHANICSBURG, ALL APPLICABLE SUPPLEMENTS WILL BE AUTOMATICALLY SUPPLIED. SUPPLEMENTS CAN BE ORDERED SEPARATELY BY APPLICABLE FORM NUMBER.

* FIELD ENGINEERING DIAGRAM MANUAL
** FIELD ENGINEERING SUPPLEMENT

INTERNATIONAL BUSINESS MACHINES CORP.				DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME				FEB 68	421047.			X PRINT TO ENG. SPEC. NO.	2207720
				MAR 68	421047A				
DESIGN									
DETAIL									
CHECK									
APPRO									
MODEL									
DRAW									
CHECK									